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K2 & Solar System Science

All of the fields that K2 observes are near the ecliptic plane in order to minimize the spin-up of the spacecraft in response to the effects of solar irradiation. The fields observed by K2 are thus rich in Solar System objects including planets, asteroids and trans-Neptunian objects (TNOs). K2 has already performed observations of Neptune and its large moon Triton, 68 Trojan and Hilda asteroids, 5 TNOs (including Pluto) and Comet C/2013 A1 (Siding Springs). About 10,000 main-belt asteroids that fell into the pixel masks of stars have been have been serendipitously observed. Observations of small bodies are especially useful for determining rotation periods. Uranus will be observed in a future campaign (C8), as will many more small Solar System bodies. The status of various K2 Solar System studies will be reviewed and placed within the context of our current knowledge of the objects being observed.